Iowa Department of Natural Resources Environmental Protection Commission

ITEM 8 DECISION

TOPIC

Final Rule – Amend Subrules 113.2(8), 113.2(10) and rule 113.3 of 567-Chapter 113 - Sanitary Landfills for Municipal Solid Waste: Groundwater Protection Systems for the Disposal of Non-Hazardous Wastes

The Commission is requested to approve the attached Final Rule amending subrules 113.2(8), 113.2(10) and rule 113.3 of 567-Chapter 113 "Sanitary Landfills for Municipal Solid Waste: Groundwater Protection Systems for the Disposal of Non-Hazardous Wastes."

This amendment arose from public comments to and an objection placed upon subrule 113.2(8) by the Administrative Rules Review Committee pursuant to Iowa Code section 17A.4(5) on December 11, 2007. The Administrative Rules Review Committee determined that subrule 113.2(8) is unreasonable and stated "These members are concerned that subrule 113.2(8) constitutes an improper regulatory taking." The legal effect of this objection is to shift the burden of proof to the Department in any legal challenge to the subrule. Such legal challenge has been filed.

In June of 2007 the Department proposed and the Commission adopted the existing rule for the following purposes:

- 1. To provide protection of groundwater to the maximum extent practical in compliance with section 455E.5(1) of the Code of Iowa.
- 2. To achieve compliance with the Federal Resource Conservation and Recovery Act and applicable regulations adopted by the United State Environmental Protection Agency; and
- 3. To the extent specific Iowa municipal solid waste landfills have existing groundwater contamination, to minimize the risk of additional contamination at those sites.

In light of the contradictory or unclear positions taken by the U.S. EPA since the adoption of the final rule, the comments received from the regulated public, and the actions of the Administrative Rules Review Committee, the Department has determined it is appropriate to review and revise subrule 113.2(8). Ultimately, the Department has determined that the revision of subrule 113.2(10) and rule 113.3 are necessary to effectuate the revision of subrule 113.2(8).

The Department proposes the rule amendments contained herein as a comprehensive approach to replacement of the prescriptive requirements of current subrule 113.2(8)"c." The proposed amendments are a hybrid of the multiple options considered by the Department, as outlined in the preamble. These amendments are intended to:

- 1. Allow the Department to focus compliance efforts on those municipal solid waste landfills (MSWLFs) that have remaining disposal capacity over unlined landfill units that are not in compliance with current liner and leachate collection system requirements.
- 2. Remove the three-year timeframe for constructing a liner along the sideslope over a non-compliant MSWLF unit by instead allowing site specific conditions to dictate when or if the side liner is necessary.
- 3. Clarify that waste placement in areas over a previously filled MSWLF unit constitutes a vertical expansion by adding a definition in rule for "vertical expansions."
- 3. Clarify that in order to place waste in vertical expansion areas, a separatory liner and leachate collection system must be installed first between the vertical expansion and underlying non-compliant MSWLF unit that meets current rule requirements. This ensures that all waste disposal activities occur over a compliant liner system with leachate collection.
- 4. Allow an agreed to amount of time for continued waste placement in the vertical expansion area in order to obtain an adequate slope for building the separatory liner and leachate collection system.
- 5. Remove the definition of "liner" so that it is clear that the separatory liner in the vertical expansion area does not have to be connected to the basal liner in the horizontal expansion area. This is particularly beneficial in instances where the vertical expansion area has already received waste. This would avoid MSWLF owners from having to construct a liner over areas already having a compliant basal liner.
- 6. Address the objection filed by the Administrative Rules Review Committee in regard to existing subrule 113.2(8)"c."
- 7. Reduce the regulatory burden of the 2007 rule revisions on those MSWLFs with remaining disposal capacity only over compliant MSWLF units by not requiring construction of an additional liner over an existing basal liner and leachate collection system.

The Department is also requesting the addition of subrule 113.2(8)"d" to address questions that have arisen in regard to the current closure requirements for sites that were closed pursuant to the previous rule requirements.

The Commission is requested to approve this Final Rule.

Alex Moon, Environmental Program Supervisor Land Quality Bureau Environmental Services Division

November 10, 2008

ENVIRONMENTAL PROTECTION COMMISSION

Adopted and Filed

Pursuant to the authority of Iowa Code sections 455B.304, the Environmental Protection Commission hereby amends subrules 113.2(8), 113.2(10) and rule 113.3 of Chapter 113, "Sanitary Landfills for Municipal Solid Waste: Groundwater Protection Systems for the Disposal of Non-Hazardous Wastes," Iowa Administrative Code.

This amendment arose from public comments to and an objection placed upon subrule 113.2(8) by the Administrative Rules Review Committee pursuant to Iowa Code section 17A.4(5) on December 11, 2007. The Administrative Rules Review Committee determined that subrule 113.2(8) is unreasonable and stated "These members are concerned that subrule 113.2(8) constitutes an improper regulatory taking." The legal effect of this objection is to shift the burden of proof to the Department in any legal challenge to the subrule. Such legal challenge has been filed.

In June of 2007 the Department proposed and the Commission adopted the existing rule for the following purposes:

- 1. To provide protection of groundwater to the maximum extent practical in compliance with section 455E.5(1) of the Code of Iowa.
- 2. To achieve compliance with the Federal Resource Conservation and Recovery Act and applicable regulations adopted by the United State Environmental Protection Agency; and
- 3. To the extent specific Iowa municipal solid waste landfills have existing groundwater contamination, to minimize the risk of additional contamination at those sites.

In light of the contradictory or unclear positions taken by the U.S. EPA since the adoption of the final rule, the comments received from the regulated public, and the actions of the Administrative Rules Review Committee, the Commission has determined it is appropriate to review and revise subrule 113.2(8). Ultimately, the Commission has determined that the revision of subrule 113.2(10) and rule 113.3 are necessary to effectuate the revision of subrule 113.2(8).

The Commission is also adding paragraph 113.2(8)"d" to address questions that have arisen in regard to the current closure requirements for sites that were closed pursuant to the previous rule requirements.

The Commission adopted a Notice of Intended Action on May 13, 2008 proposing amendments to subrule 113.2(8). The Notice of Intended Action was published June 4, 2008 as ARC 2868B. A public hearing was held July 10, 2008 with comments accepted through that date. 15 individuals commented on the proposed amendments to subrule 113.2(8). But for a few individuals that supported the Notice of Intended Action as proposed, most commented that the proposed revision was insufficient because it was either too flexible in allowing some landfill agencies to avoid complying with the liner requirements and to continue placing waste in unlined areas or not flexible enough because it did not allow the use of the entire landfill cell, specifically the side slope over unlined areas, that was previously constructed and approved. Those who are interested in viewing the public comments submitted by the individuals and organizations may visit the Department's Record Center on the 5th floor of the Wallace Building, 502 East 9th Street, Des Moines, IA 50319. Copies of the comments may also be requested by contacting the Record Center at 515/242-5818.

After review of the public comments and further analysis, the Department considered the following options in regard to the amendment of paragraph 113.2(8)"c." The Commission's decision is based upon a review of these options and the Department's recommendations in

regard thereto. This summary is intended to serve as the response to the public comments received.

Option #1: Withdraw the proposed rulemaking.

The Department considered the environmental and regulatory impacts of withdrawing the rulemaking and retaining the existing rule. The existing rule reads as follows:

113.2(8)"c" Existing MSWLF units that have an approved leachate collection system and a basal liner beneath the unit that is either a composite liner or an alternative liner modeled at an approved point of compliance, but that is not continuous onto the sides of the unit, may continue to place waste after October 1, 2007, in those portions of the unit directly underlaid by the basal liner. Such units shall be brought into compliance in accordance with subrule 113.2(9) by constructing a leachate collection system and liner on the sides of the unit that meet the requirements of subrule 113.7(5) and are continuous beneath and onto the sides of the unit.

This course of action maintains the maximum level of groundwater protection. However, the Department believes that a more narrowly tailored approach may allow the Department to achieve its environmental protection objectives while reducing the regulatory impacts on Iowa municipal solid waste landfills. Additionally, the existence of the objection on this subrule and the pending lawsuit create a level of uncertainty surrounding this subrule. Such uncertainty is contrary to the interest of the public or the regulated community and impedes the Department's ability to implement the rule revisions of 2007.

Option #2: Adopt the revised subrule as set forth in the Notice of Intended Action.

The Department considered the environmental and regulatory impacts of adopting a final rule as proposed in the Notice of Intended Action. The Notice of Intended Action proposes the following language for paragraph 113.2(8)"c":

113.2(8)"c". Existing MSWLF units that have an approved leachate collection system and a basal liner beneath the unit that is either a composite liner or an alternative liner modeled at an approved point of compliance, but that is not continuous onto the sides of the unit, may continue to place waste after October 1, 2007 in those portions of the unit directly underlain by the basal liner. Any new unit or lateral expansion of an existing unit shall be constructed with a leachate collection system and liner that meets the requirements of subrule 113.7(5) which is continuous beneath and onto the sides of the new unit or lateral expansion of an

existing unit. Such units shall be brought into compliance in accordance with subrule 113.2(9) by constructing a leachate collection system and liner on the sides of the unit that meets the requirements of subrule 113.7(5) and is continuous beneath and onto the sides of the unit.

This course of action would maintain the requirement that all future disposal of solid waste be over a basal landfill liner that has been approved at some point by the Department while allowing municipal solid waste landfills to more fully recoup their investment in these compliant or previously compliant MSWLF units. The maximum level of groundwater protection is provided by the continued requirement that waste only be deposited over an approved basal liner avoiding the sideslope area in question. The concerns raised in regard to this option relate to the fact that landfills which may never be disposing of waste vertically over an unlined MSWFL unit in the future would still be required at the next time of construction to install a side liner over the top of an already approved basal liner so that it is continuous with the basal liner in the horizontal expansion area. The Department now believes that a more narrowly tailored approach may allow the Department to achieve its environmental protection objectives while reducing the regulatory impacts on Iowa municipal solid waste landfills.

Option #3. Revert to pre-2007 rule language.

The parties opposed to the current language of paragraph 113.2(8)"c" have repeatedly proposed that the Department rescind paragraph 113.2(8)"c" and readopt the language of former subrule 113.7(1) which read:

Former 113.7(1) Design and construction. Sanitary disposal projects designed and constructed in accordance with rules in effect at the time of construction shall not be required to be redesigned or reconstructed due to subsequent rule changes unless the department finds that such facilities are causing pollution. Such facilities shall be brought into compliance with rule in effect at the time of reconstructing, enlarging, or otherwise modifying the sanitary disposal project, or at the time of permit renewal.

This language is similar to current paragraph 113.2(10)"a" which states:

113.2(10) *Compliance with amendments to these rules.*

a. Owners or operators of existing MSWLF units that have an approved leachate collection system and a composite liner or a leachate collection system and an alternative liner modeled at an approved point of compliance, shall not be required to redesign or reconstruct the approved leachate collection system or liner due to subsequent amendments to these rules unless the department finds that such facilities are causing pollution. This requirement shall not preclude compliance with paragraph 113.2(8)"c."

The primary difference between these subrules is that current paragraph 113.2(10)"a" applies only to future rule changes after December 10, 2007.

The Department has considered the environmental and regulatory impacts of readopting the prior language of former subrule 113.7(1) as a final rule. The Department rejects the adoption of former rule 113.7(1) because it could allow the continued use of the completely unlined landfills closed in 2007. The former rule is also rejected because it lacks clarity in that the former rule language does not specify what level of pollution is necessary to justify redesign or reconstruction and whether the language requires the closure of noncompliant cells at the time of permit renewal, regardless of the existence of pollution. These issues remain unresolved with new subrule 113.2(10).

Option #4. Rescind paragraph 113.2(8)"c" and make changes elsewhere to achieve the purposes of this rulemaking.

The Department has determined, and the Commission agrees, that the best way to effectuate the purpose stated in the Notice of Intended Action, to allow municipal solid waste landfills to continue to use previously approved landfill cells which have a basal liner and leachate collection system until those cells have been filled, is to rescind paragraph 113.2(8)"c" entirely, to revise paragraph 113.2(10)"a" to require the installation of a separatory liner meeting current rule requirements only over previous waste disposal areas which have no liner already beneath the waste that is in place, to rescind the definition of "liner" found in rule 113.3, and to add a

definition of "vertical expansion" to the chapter. This approach results in the replacement of the prescriptive requirements of current paragraph 113.2(8)"c" with requirements designed to:

- 1. Allow the Department to focus compliance efforts on those municipal solid waste landfills (MSWLFs) that have remaining disposal capacity over unlined landfill units that are not in compliance with current liner and leachate collection system requirements.
- 2. Remove the three-year timeframe for constructing a liner along the sideslope over a non-compliant MSWLF unit by instead allowing site specific conditions to dictate when or if the side liner is necessary.
- 3. Clarify that waste placement in areas over a previously filled MSWLF unit constitutes a vertical expansion by adding a definition in rule for "vertical expansions."
- 3. Clarify that in order to place waste in vertical expansion areas, a separatory liner and leachate collection system must be installed first between the vertical expansion and underlying non-compliant MSWLF unit that meets current rule requirements. This ensures that all waste disposal activities occur over a compliant liner system with leachate collection.
- 4. Allow an agreed to amount of time for continued waste placement in the vertical expansion area in order to obtain an adequate slope for building the separatory liner and leachate collection system.
- 5. Remove the definition of "liner" so that it is clear that the separatory liner in the vertical expansion area does not have to be connected to the basal liner in the horizontal expansion area. This is particularly beneficial in instances where the vertical expansion area has already received waste. This would avoid MSWLF owners from having to construct a liner over areas already having a compliant basal liner.

- 6. Address the objection filed by the Administrative Rules Review Committee in regard to existing subrule 113.2(8)"c."
- 7. Reduce the regulatory burden of the 2007 rule revisions on those MSWLFs with remaining disposal capacity only over compliant MSWLF units by not requiring construction of an additional liner over an existing basal liner and leachate collection system.

The Environmental Protection Commission has adopted 567 IAC 4.1, which adopts by reference 561 IAC 4.1, through which the Department has adopted the Iowa Uniform Rules on Agency Procedure for Rulemaking. The Uniform Rules on Agency Procedure for Rulemaking provide:

X.9 Variance between adopted rule and published notice of proposed rule adoption.

- **X9(1)** The agency shall not adopt a rule that differs from the rule proposed in the Notice of Intended Action on which the rule is based unless:
- a. The differences are within the scope of the subject matter announced in the Notice of Intended Action and are in character with the issues raised in that notice; and
- b. The differences are a logical outgrowth of the contents of that Notice of Intended Action and the comments submitted in response thereto; and
- c. The Notice of Intended Action provided fair warning that the outcome of that rule-making proceeding could be the rule in question.
- **X.9(2)** In determining whether the Notice of Intended Action provided fair warning that the outcome of that rule-making proceeding could be the rule in question, the department shall consider the following factors:
- a. The extent to which persons who will be affected by the rule should have understood that the rule-making proceeding on which it is based could affect their interests;
- b. The extent to which the subject matter of the rule or the issues determined by the rule are different from the subject matter or issues contained in the Notice of Intended Action.
- c. The extent to which the effects of the rule differ from the effects of the proposed rule contained in the Notice of Intended Action.

The Notice of Intended Action for this rulemaking stated: "The amendment is intended to allow municipal solid waste landfills to continue to use previously approved landfill cells which have a basal liner and leachate collection system until those cells have been filled." The amendments contained herein include additional subrules but do no more than allow municipal solid waste landfills to continue to use previously approved landfill cells which have a basal liner

and a leachate collection system until those cells have been filled as stated in the Notice of Intended Action.

The changes from the Notice of Intended Action have the following impacts:

- 1. To not require the installation of a liner on top of existing waste at the next time of construction regardless of site specific conditions that may or may not already exist.
- 2. To require the construction of a compliant liner only in those areas that do not already have in place an approved liner and leachate collection system thereby avoiding the need for any excavation of waste or attempts to model a barrier layer that has already been covered.
- 3. Remove the definition of "liner" so that it is clear that the separatory liner in the vertical expansion area does not have to be connected to the basal liner in the horizontal expansion area. This is particularly beneficial in instances where waste has already been partially placed in areas of the vertical expansion area. This again would avoid MSWLF owners from having to construct a liner over areas already having a compliant basal liner. Removal of the "liner" definition would also allow for the possibility of successfully modeling a liner design that does not have a continuous connection between the basal liner and other liners proposed to be employed.
- 4. To clearly define that waste disposal on top of or against the side slopes of previous filled MSWLF units is considered a vertical expansion of the underlying unit.

The final amendments are in conformity with the Uniform Rule as set forth above. The amendments are in regard to the same subject matter as the Notice of Intended Action. The amendments are a logical outgrowth of the Notice of Intended Action. Interested parties had sufficient notice that the Commission was proposing rulemaking in regard to the continued use of previously approved MSWLF units.

These amendments are intended to implement Iowa Code section 455B.304.

The following amendments are adopted:

ITEM 1. Amend 567 IAC 113.2(8) as follows:

567--113.2(8) Closure of existing MSWLF units.

- a. Existing MSWLF units that cannot make the demonstration specified in paragraph 113.6(2)"a," pertaining to airports, in 113.6(2)"b," pertaining to floodplains, or in 113.6(2)"f," pertaining to unstable areas, must close in accordance with rule 113.12(455B) and conduct postclosure activities in accordance with rule 113.13(455B).
- b. Except as provided in paragraph 113.2(8)"c" below, eExisting MSWLF units that do not have an approved leachate collection system and a composite liner or a leachate collection system and an alternative liner modeled at an approved point of compliance shall cease accepting waste by October 1, 2007.
- c. Reserved. Existing MSWLF units that have an approved leachate collection system and a basal liner beneath the unit that is either a composite liner or an alternative liner modeled at an approved point of compliance, but that is not continuous onto the sides of the unit, may continue to place waste after October 1, 2007, in those portions of the unit directly underlaid by the basal liner. Such units shall be brought into compliance in accordance with subrule 113.2(9) by constructing a leachate collection system and liner on the sides of the unit that meet the requirements of subrule 113.7(5) and are continuous beneath and onto the sides of the unit.
- d. Those portions of existing MSWLF units demonstrating placement of final cover in conformance with previously approved plans and specifications or regulations in effect at the time of such closure shall not be required to apply additional cover solely to achieve compliance with rule 113.12(455B).

ITEM 2. Amend 567 IAC 113.2(10) as follows:

567--113.2(10) *Compliance with rule changes.*

- a. Owners or operators of existing MSWLF units that have an approved leachate collection system and a composite liner or a leachate collection system and an alternative liner modeled at an approved point of compliance, shall not be required to redesign or reconstruct the approved leachate collection system or liner due to subsequent amendments to these rules MSWLF units due to subsequent amendments to these rules subsequent to such approval unless the department finds that such facilities are causing pollution. This requirement shall not preclude compliance with paragraph 113.2(8)"c." or-that continued use of such facilities results in a vertical expansion on top of or against the sideslopes of a previously filled non-compliant MSWLF unit. Prior to waste placement in the vertical expansion area, revised design plans shall be submitted to include construction of a separatory liner and leachate collection system that complies with all the requirements of subrule 113.7(5) to be placed between the area of vertical expansion and the underlying non-compliant MSWLF unit. The department, in conjunction with the MSWLF owner or operator, shall determine the maximum amount of time necessary for continued waste placement on top of or against the previously filled non-compliant MSWLF unit to achieve an adequate slope in order to maintain drainage of leachate to the leachate collection system after expected settlement.
- b. Except as authorized by subrule 113.2(9) and paragraph 113.2(10)"a," if any new requirement conflicts with a provision of or an operating procedure prescribed in the engineering plans or the MSWLF permit, the facility shall conform to the new rule.

ITEM 3. Amend 567 IAC 113.3(455B) as follows:

567—113.3(**455B**) *Definitions*.

Unless otherwise noted, the definitions set forth in Iowa Code section 455B.301 and 567—Chapter 100, which are incorporated by reference; the definitions that appear in specific rules within this chapter; and the following definitions shall apply to this chapter:

"Liner" means a continuous layer of recompacted natural soil, synthetic materials, or both, beneath and on the sides of an MSWLF unit that restricts the downward or lateral escape of solid waste, leachate, and gas.

"Vertical expansion" means additional waste placement on top of or against the side slopes of a previously filled MSWLF unit, whether active, closed, or inactive.

Date	
Pichard A. Lagrald Director	
Richard A. Leopold, Director	